United Nations A/56/318

General Assembly

Distr.: General
23 August 2001

Original: English

Fifty-sixth session
Items 20 and 110 of the provisional agenda*

Strengthening of the coordination of humanitarian and disaster relief assistance of the United Nations, including special economic assistance

Environment and sustainable development

Letter dated 22 August 2001 from the Permanent Representative of Kyrgyzstan to the United Nations addressed to the Secretary-General

Upon the instructions of my Government, I have the honour to transmit to you the appeal of the deputies of the Legislative Assembly of the Zhogorku Kenesh, the Parliament of the Kyrgyz Republic, concerning global contamination of the Central Asian region by radioactive waste (see annex).

I should be grateful if you would have the present letter and its annex circulated as a document of the fifty-sixth session of the General Assembly, under items 20 and 110 of the provisional agenda.

(*Signed*) Kamil **Baialinov**
Ambassador
Permanent Representative

* A/56/150.

01-51960 (E) 200901 200901

Annex to the letter dated 22 August 2001 from the Permanent Representative of Kyrgyzstan to the United Nations addressed to the Secretary-General

[Original: Russian]

Appeal by the deputies of the Legislative Assembly of the Zhogorku Kenesh of the Kyrgyz Republic to the United Nations from the International Atomic Energy Agency and the World Bank

Kyrgyzstan and the whole of Central Asia are threatened by global contamination from radioactive wastes

The deputies of the Legislative Assembly of the Zhogorku Kenesh — the Parliament of Kyrgyzstan — are following with deep concern the exceptionally severe environmental situation taking shape both in Kyrgyzstan itself and throughout central Asia. Over our region there hangs a terrible danger which could at any moment become a genuine disaster.

In the years when Kyrgyzstan formed part of the Soviet Union, its great wealth of mineral resources, almost all of them strategic in nature, played a vital part in the entire country's economy.

For example, during the Second World War a heavy metal like lead was in urgent demand for the defence industry, and began to be mined in Kyrgyzstan's mountains. After the war the production of lead concentrates continued for a long time, up until 1970. In all, more than 80,000 tons were extracted. These data are no longer a State secret. There was a vast demand for this metal on the domestic and external markets. The average price of a pound on the world market was more than US$ 22. Our enterprise was subordinate to the military-industrial complex of the Soviet Union, and in particular to the Ministry of Non-ferrous Metallurgy of the USSR.

Then the mining of lead ended. However, four tailings ponds in which 5 million cubic metres of waste left over from ore processing were stored, remained in our territory. The main pollutant is radioactive thorium. The danger this element poses is now common knowledge. In the meantime, the dams enclosing the tailings ponds have long ago fallen into disrepair, and unless appropriate measures are urgently taken to reinforce them may be destroyed at any time, all the more so in that all of the tailings are located in a zone with a high level of seismic activity and heavy rainfall.

Breaching of the dams and outflow of the contaminated lead wastes could lead to pollution of the environment and to discharge of the whole mass of tailings into the Kichi-Kemin river and from it to the Chu river, the basin of which is currently inhabited by several million nationals of Kyrgyzstan and Kazakhstan. In the view of scientists, the area polluted if this happens will be more than 5,000 square kilometres.

Until recently, Kyrgyzstan was the largest producer of mercury. During the Second World War, when the Nikitov mercury combine in Ukraine was in the hands

of the fascist army, the construction of a mercury combine in our territory was initiated. It was built within a very short time, far from the railway and solely by Kyrgyz labour. The Khaidarken mercury combine became the only supplier of mercury to the front and to the national economy of the Soviet Union. Over the more than 50 years for which it was active, the Khaidarken combine delivered to the State about 30,000 tons of metallic mercury. The main consumers were Russia and Ukraine. A considerable proportion was exported to many foreign countries. In the 1970s and 1980s, the value of one flask (34.5 kilograms) on the world market was up to US$ 400.

It is difficult to over-evaluate the significance for the national economy of such an extremely valuable metal as antimony. To make a brief excursion into history, pre-revolutionary Russia had no antimony industry. The Czar's Government was compelled to buy antimony abroad. In the first years of its existence, the Soviet State also imported antimony. But there was a need to establish industrial production of antimony in the Soviet Union, in order to stop importing it from foreign countries. And this objective was successfully achieved thanks to Kyrgyzstan's opening up of its next mineral treasure. In 1936 the Kadamzhai metallurgical combine went into operation, and became the only producer of antimony in the Soviet Union, and in all respects a major one. From 1940 to 1991, that is to say for 51 years, the combine gave the State more than 235,000 tons of antimony production. In terms of purity, Kyrgyz antimony set the quality standard on the world market. Through exports from the Soviet Union, our mercury was delivered to more than 40 countries in the world, including Germany, the United Kingdom, Japan, France, Belgium, Switzerland, the Netherlands, India and others. In the 1970s and 1980s, the value of a ton of metallurgical-grade antimony on the world market was between US$ 2,300 and US$ 2,800.

In 1967 the Kyrgyz Mining and Metallurgical Combine went into operation, and for a quarter of a century steadily increased its rate of production of chemicals and metals. It was the Soviet Union's main supplier of rare earth production, producing more than 120 varieties. Such oxides and metals as dysprosium, holmium, erbium, thulium, ytterbium, and lutecium were produced only by this combine. Higher oxides of lanthanum, caesium and neodymium were also produced there. It is difficult to list all the areas of science and technology in which rare earth metals and their compounds are used. As a result of their unique chemical properties, they are widely utilized in the ferrous and non-ferrous metals industries, nuclear technology, aircraft and missile production, radio electronics and electrical engineering, the glass and ceramics industry, agriculture and pharmacology. The combine also developed substantial semiconductor production to meet the growing demand from the electronics, radio engineering and electrical engineering industries in the former Soviet Union and its foreign partners for advanced materials. In all, over a quarter of a century the combine produced 5,454 tons of rare earth metals and their compounds, as well as more than 370,000 kilograms of monocrystalline silicon and more than 87,000 polished silicon sheets and silicon structures with a total value of more than 59 billion roubles (at the new rate). Its output was supplied mainly to Russia and was sold, as part of the Soviet Union's exports, to more than 30 foreign countries.

The lead, mercury and antimony produced in Kyrgyzstan were up to world standards, and accordingly demand for them remained high throughout the period for which they were produced.

There has long been no Soviet Union on the map of the world, and accordingly the former Ministry of Non-ferrous Metallurgy, to which the mercury, antimony and mining and metallurgical combines were subordinate, is also no longer in existence. As a legacy, Kyrgyzstan has inherited tailings ponds and slag heaps, the danger of which is impossible to overestimate even theoretically.

The tailings pond at the Kadamzhai antimony combine alone has a volume of 4.4 million cubic metres. All the solid and liquid wastes from the production of this combine contain arsenic and other harmful chemicals. Unless the dams of the tailings pond are reinforced, in an emergency situation (a destructive earthquake or mud flows — and in a mountainous region of high seismic activity (up to force 9) like Kyrgyzstan, such natural phenomena are highly likely) the tailings pond will come down on the large village of Kadamzhai lying further down the slope and into the Ak-Suu river, which flows into the Fergan valley in Uzbekistan. The tailings pond of the Khaidarken mercury combine presents the same danger.

During the years of the "cold war", the Soviet Government made incredible efforts to find strategic raw material in order to develop nuclear energy. The first uranium ore was mined in Kyrgyzstan.

Because of the secrecy of production, this fact was not divulged, but it was and remains part of the overall history of the former Soviet Union. At the start of the 1950s, geologists discovered in Kyrgyzstan such uranium deposits as those at Min-Kush, Kazhi-Sai, Mayluu-Suu and Sumsar-Shekaftar, and in record time they were brought into operation. On their bases, the Kyrgyz mining combine was constructed — the first enterprise in the country to lay the foundations for the development of the nuclear industry. From then on the combine was the only one and the largest in the Soviet Union, and for more than 40 years it processed radioactive raw material for the country's defence and energy needs. The combine's production over the years for which it was in existence is valued at billions of United States dollars. A large proportion of it was exported to countries outside the Soviet Union. Over 36 years (from 1955 to 1991), more than 60,000 tons of natural uranium (lower and higher oxides) and more than 15,000 tons of molybdenum were produced. However, specific figures cannot be given for the monetary and hard currency revenues derived from the combine's production, since all the information was at the time kept strictly secret and held centrally in the former Soviet Union. It may however be recalled that in those years 1 kilogram of enriched uranium sold for an average of US$ 28. If the 60,000 tons of uranium produced by the combine are valued at that figure, the selling price is more than US$ 1.6 billion.

Despite the vast revenues yielded by the production from the combine, the centre of the former Soviet Union did not allocate sufficient resources for reliable burial of the harmful wastes from the uranium production. All the mines and the combine itself were directly subordinate to the Soviet Union's military-industrial complex, and enjoyed the special status of being outside the control of Kyrgyzstan. For decades, as a result of production from Kyrgyzstan's mining enterprises, which were subordinate to the former ministries of intermediate engineering, the nuclear industry and the non-ferrous metals industry, a vast quantity of tailings ponds and dumps containing rock and substandard ores accumulated throughout the territory of the Republic. The area of land subject to radioactive contamination was 6.5 thousand hectares, on which were dumped 145 million tons of radioactive waste from uranium production.

In Soviet times the ministry of the military-industrial complex did to some extent monitor the state of the tailings ponds in Kyrgyzstan's territory. This required a considerable financial outlay which was within the reach of that large country, all the more so in that Kyrgyzstan's wealth was of benefit equally to all the former republics of the Soviet Union. When Kyrgyzstan was left alone with the problem, it became clear that it was no longer a matter of urgency, but rather of emergency, because Kyrgyzstan did not and does not have the material and technical capacity to perform the work. Meanwhile, the danger of Kyrgyzstan and the whole of Central Asia being contaminated with radioactive waste is becoming more and more real with every year that passes. It is impossible to guess which earthquake — and Kyrgyzstan is in a region of high seismic activity — which flood — and they occur frequently in our part of the world — which mudslide or avalanche caused by a major thaw or by rainfall may become the cut-off point beyond which a probable tragedy becomes a real disaster. But that it will happen one day, unless super-urgent measures are taken, unfortunately cannot be ruled out.

As a result of the absence in recent years of appropriate monitoring and oversight of the state of the facilities at the tailings ponds, they have almost all sustained severe damage, and the risk has arisen they may totally collapse, spilling the radioactive wastes from uranium production stored in the tailings ponds on residential areas and the environment, into the basins of Lake Issyk-Kul, the Aral Sea and the reservoir on the Naryn river, and also into the Syr-Darya river. In the former Soviet Union, a programme was drawn up for priority work on the radiation rehabilitation of territories polluted by enterprises involved in the nuclear fuel cycle in the Kyrgyz Republic, but as a result of the collapse of the Soviet Union it was never put into effect.

Apart from the tailings ponds already mentioned and the dangers associated with them, there are also others.

The tailings ponds and uranium ore wastes of the Mayluu-Suu complex are located for the most part within the town of the same name, on the flood plains of the Mayluu-Suu and Alyampasay rivers. The Mayluu-Suu uranium deposits were worked from 1946 to 1967, that is to say for 23 years. The total volume of the uranium wastes stored in the 23 tailings ponds and 13 dumps is 1.9 million cubic metres. The gamma radiation dose level is up to 600 microroentgens/hour. The tailings ponds and uranium ore dumps and the entire zone are in a state of disrepair. This happened as a result of errors and miscalculations that were made in the past in the selection of tailings pond locations, the means of storage, the planning of the facilities and their operation. As a result, the tailings ponds were located at sites where there is a danger of landslides, in the channels and on the flood plains of rivers and streams liable to mud flows and directly adjacent to residential areas without the establishment of a health protection zone. It was not taken into account that the occurrence of landslides could give rise to multi-stage sequential disasters, such as an earthquake, landslides, the covering of riverbeds and valleys with uranium wastes, and their inundation by mud flows and radioactive wastes from the tailings ponds.

Experts who have investigated the current state of the tailings ponds and uranium ore dumps in the Mayluu-Suu zone have concluded that the danger of radioactive contamination of a large area of Kyrgyzstan, Uzbekistan and Tajikistan and of the tributaries of the Syr-Darya river is a perfectly real one. The tailings

ponds and uranium ore dumps are located in a highly seismically active (force 9) zone. In order to prevent a catastrophic threat there is a need, according to the recommendations of scientific research institutes, to relocate all the tailings ponds and uranium ore dumps from the Mayluu-Suu complex to other locations with a firm ground surface in a zone not subject to landslides and further away from the town of Mayluu-Suu and the river flood plains. The conduct of this work will require, according to the experts' data, not less than US$ 70 million.

The Sumsar-Shekaftar complex. In the region of the Sumsar settlement there are three tailings ponds at which 4.5 million cubic metres of wastes are stored. The pollutants are lead, zinc and cadmium wastes. The tailings ponds have not been rehabilitated and are in a state of severe disrepair. In the territory of the Shekaftar settlement, eight dumps are located containing 700,000 cubic metres of substandard uranium ores; they have not been rehabilitated, and the radiation level is up to 90 microroentgens/hour. To carry out the rehabilitation project drawn up by the Industrial Technology Research Institute of Ukraine, about US$ 3 million will have to be spent.

The Kadzhi-Say complex. The tailings ponds located in the region of the Kadzhi-Say settlement are extremely close to Lake Issyk-Kul'. About 600,000 tons of wastes are stored in the two tailings ponds. The radiation background is up to 500 microroentgens/hour. The bed of the tailings ponds is unshielded, and they are in a state of severe disrepair. If the radioactive wastes they contain spill out, Lake Issyk-Kul' will be contaminated. This gem of nature, a unique health resort like no other in the world, will perish. Meanwhile it caters every year to more than half a million people, including people from many foreign countries, and there are long-term plans for an annual intake of more than 2 million people. In addition, more than 400,000 people live in the towns and villages surrounding the lake. To put it plainly, Lake Issyk-Kul' is under a major environmental threat. Unless urgent measures are taken to rehabilitate the tailings ponds, a disaster may occur, with more than 600,000 cubic metres of radioactive material flowing into the lake. Such a disaster is probable because of the high level of seismic activity around the worked-out Kadzhi-Say mine. There is an urgent need for rehabilitation of the land located around the tailings ponds. The latter urgently need to be relocated to a new site further away from the shores of the lake. Experts have concluded that the cost of all the rehabilitation work and of moving the tailings ponds to new locations far away from the lake will amount to about US$ 20 million. Radiation contamination of Lake Issyk-Kul' would be an irreplaceable loss not only for the Commonwealth of Independent States, but also for the entire civilized world.

The Min-Kush complex. In this region there are four sealed-off uranium tailings ponds containing 1.9 million cubic metres of wastes, and the gamma radiation dose is up to 50 microroentgens/hour. The tailings ponds are located in the central part of Kyrgyzstan, in the Naryn river basin, and if the protective dam is breached vast areas of the country could be contaminated.

One of the large tailings ponds was built directly in the flat plain of the Tuyuk-Suu river, and if the protective dam is breached about 1 million cubic metres of radioactive waste would flow into the Kokomerren river, the main tributary of the Naryn, the water of which is used by the many millions of inhabitants of the Fergan valley and the Aral Sea basin. In view of this great danger, the Uran-Erzberger company drew up under the TASIS programme a justification for the need to

transfer the Tuyuk-Suu tailings pond from the flood plain of the river to another location further away from the Tuyuk-Suu river. The cost of the project is specified as US$ 5 million.

The Kara-Balta complex. The Kara-Balta tailings ponds are the largest in the world. The volume of waste stored in them is about 40 million cubic metres. The radiation dose is up to 1,330 microroentgens/hour.

On the whole, the tailings ponds constructed and used met the technical safety requirements for preventing radioactive contamination of the environment. However, the length of time that has elapsed since they were brought into operation has taken its toll. In recent years, because of the absence of appropriate work to reinforce the tailings ponds, a process of erosion of their long term reliability has been under way. In essence, an emergency situation has been created: the limits of the town of Kara-Balta, with its population of 50,000, have been extended as far as the health protection zone of the tailings ponds, and as a result, residential areas of Kara-Balta are threatened by wind erosion of the fine fraction of the tailings, and infiltration of radionuclides that are contaminating the ground waters has begun. Currently, about 2,000 tons of waste from molybdenum and uranium production are discharged into the ponds each year. There is an urgent need to seal off about 80 per cent of the territory at the tailings pond that is in operation, and those no longer in use are also in need of rehabilitation. According to expert calculations, to conduct these and other activities aimed at preventing radioactive contamination of the town of Kara-Balta and adjacent inhabited areas will require more than US$ 5 million.

The above facts are convincing evidence that the threat of radioactive contamination hangs like a sword of Damocles over Kyrgyzstan and over the entire central Asian region. In order to prevent the terrible danger radioactive wastes pose for the health of present and future generations of the peoples of Central Asia, the following steps need to be taken immediately:

(a) Sealing off of the most dangerous tailings ponds;

(b) Rehabilitation work on individual tailings ponds and reinforcement of their dams;

(c) Relocation and reburial of the radioactive waste from the most dangerous tailings ponds at new sites far from towns and inhabited areas.

According to expert calculations, carrying out all these measures and the associated construction and installation work to ensure protection of the environment against contamination with radioactive waste under the programme for priority work on the radiation rehabilitation of territories contaminated by enterprises involved in the nuclear fuel cycle in the Kyrgyz Republic which was drawn up when the USSR was in existence, but has to date not been implemented, will require more than US$ 200 million.

Kyrgyzstan does not now have these resources available, nor will it even in the long term. This is not Kyrgyzstan's fault, but a great misfortune that has befallen it and has both objective and subjective causes. Unfortunately, God bypassed Kyrgyzstan in that He did not place in its soil either oil or gas, and this now condemns our people to experience incredible difficulties in their daily lives. At the same time, during the seventy years of the Soviet period of its history Kyrgyzstan was unable, because of the geo-economic strategy then pursued, to engage in trade

in many vital natural resources, in that it was compelled to devote itself to developing in directions that were of priority for the country as whole. And although Kyrgyzstan is exceptionally rich in freshwater resources — it has almost half of the water in Central Asia and the hydroelectric capacity of our rivers is estimated at 162 billion kilowatts — only 10 per cent of the total is being exploited. If we had the resources, these reserves could bring substantial revenues. Extremely rich coal deposits, with identified reserves of more than 2 billion tons, including 500 million tons of coking coals, remain almost untouched. Also unexploited are more than 7 million tons of iron ores, and a mountain containing nepheline, an important raw material for the aluminium and glass industries, also remains untouched. Tens of thousands of tons of such a valuable metal as tungsten, used in the production of tool steel and hard alloys used in electronics and engineering, are not being mined. We have such an extremely useful material for industry as the silver-white metal tin, reserves of which amounting to 500,000 tons were confirmed by the Mineral Reserves Commission of the Council of Ministers of the USSR. And this wealth, too, lies untouched. Many gold-bearing deposits and other useful minerals are not being mined. Many such instances could be given.

The above-mentioned resources and many other of Kyrgyzstan's riches were not exploited during the Soviet period, we repeat, primarily because our Republic complied strictly with the principle of Union-wide division of labour. The central Union required Kyrgyzstan to specialize in the production and supply to essential stocks of lead, mercury, antimony, uranium and rare earth elements, and this instruction, as already noted, was strictly complied with for many decades; in the name of ensuring intensive development of agriculture in the Soviet Union, and above all in neighbouring States, Kyrgyzstan was invited to build in its territory large interstate reservoirs and other irrigation facilities. As a result, more than 50,000 hectares of productive land were flooded and thousands and thousands of families were relocated from hospitable regions to mountain ravines; the Republic also produced meat and wool, sugar beet and cotton, tobacco, vegetables, fruit and other agricultural produce.

Kyrgyzstan was one of the major suppliers of meat to the central Union stocks, and occupied third place in the Soviet Union in the production of fine and semi-fine wool, after the Russian Federation and Kazakhstan; Kyrgyz wool was processed at the country's six cloth combines to produce each year woollen fabric worth almost 500 million roubles.

Kyrgyzstan established an extensive network of engineering plants producing industrial articles of which the country was in great need. They operated using raw material from other former Soviet republics. Their output was also supplied to the central Union stocks and to States abroad. In the post-Soviet period these plants were closed, as Kyrgyzstan is unable to purchase raw material from abroad, it does not possess foreign currency resources, and the integrative links with the former Soviet republics have long been disrupted by customs and other barriers. Can Kyrgyzstan, which is experiencing severe economic difficulties, prevent the threat of contamination of the territories of central Asia and its watercourses by the radioactive wastes accumulated in increasingly deteriorating tailings ponds? It cannot. Precisely for this reason, the problem we are referring to is of global significance.

The parliament of Kyrgyzstan has addressed a similar letter of appeal to the parliamentarians and heads of the former Union republics. We do not believe that the 70-year history of joint coexistence and development of our peoples in a single State should be forgotten. Consigning it to oblivion would be an unprecedented act for civilized States. The 70-year joint past of the independent post-Soviet States is an inseparable part of their lives. The terrible misfortune which is causing our people serious concern began in the Soviet period, and Kyrgyzstan must not be left in isolation to face its misfortune alone. This is why it greatly hopes that the now independent States which in the not-too-distant past formed part of a single Union will offer a helping hand to Kyrgyzstan in eliminating the danger of contamination of the central Asian environment by the radioactive wastes from uranium production.

However, bearing in mind the fact that the newly independent States have a mass of problems of their own, perhaps no less urgent, the parliament of Kyrgyzstan has seen it as its duty to turn in its misfortune to the international community, hoping to meet with due understanding.

We, the deputies of the parliament of the Kyrgyz Republic, sincerely share the profound hope of our people, and are convinced that international organizations and States outside the former Soviet Union will demonstrate their inherent sincere understanding of the concern of the Kyrgyz people and their truly humane nobility and humanism.

We should like to conclude our letter with the words of a great man to the effect that the highest criterion of a given nation's civilization is its readiness to stretch out a helping hand to less fortunate peoples (Washington).

Adopted at a meeting of the Legislative Assembly of the
Zhogorku Kenesh of the Kyrgyz Republic on
15 May 2001